

# The Square Knot

Volume 2 Issue 1  
January 2003

A publication to join in a partnership, with our  
customers, for world class healthcare



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## Questions!?

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## CDC's New Hand-Hygiene Guidelines

The Centers for Disease Control and Prevention (CDC) released new guidelines that advise the use of alcohol-based handrubs to protect patients in health care settings. The new hand hygiene guidelines were released in Chicago during the 40th annual meeting of the Infectious Diseases Society of America.

"Clean hands are the single most important factor in preventing the spread of dangerous germs and antibiotic resistance in health care settings," said Dr. Julie Gerberding, director of the CDC. "More widespread use of these products that improve adherence to recommended hand hygiene practices will promote patient safety and prevent infections."



CDC estimates that each year nearly 2 million patients in the United States get an infection in hospitals, and about 90,000 of these patients die as a result of their infection. Infections are also a complication of care in other settings including long-term care facilities, clinics, and dialysis centers. Improving hand hygiene will help prevent the spread of germs from one patient to another. Data shows that health care personnel may be more inclined to use alcohol-based handrubs because they are more convenient to use. Recent studies show that these handrubs actually reduce the number of bacteria on the hands more

effectively than washing hands with soap and water.

"Health care personnel are always on the go which sometimes makes handwashing with soap and water difficult," said Dr. Steve Solomon, acting director of CDC's Healthcare Quality Promotion Division. "These handrubs should help promote hand hygiene because they are much more accessible than sinks, take less time to use, and cause less skin irritation and dryness than many soaps."

The new guidelines recommend additional steps that administrators can take to increase adherence to good hand hygiene practices. When deciding what products to purchase, administrators should consult with health care personnel on issues like smell, consistency and the amount

of skin irritation the product may cause. If, as expected, hand hygiene products improve hand hygiene practices, preventing even a few additional health care-associated infections per year will lead to savings that will exceed any extra costs for better hand hygiene products.

The hand hygiene guidelines were developed by the CDC's Healthcare Infection Control Practices Advisory Committee (HICPAC), in collaboration with the Society for Healthcare Epidemiology of America (SHEA), the Association of Professionals in Infection Control and Epidemiology (APIC), the Infectious Disease Society of America (IDSA). Continued on page 4

## Plastics and the Microwave

Stories about the dangers of chemicals leaching from plastic into microwaved food have circulated on the Internet for years. As a result, the Food and Drug Administration (FDA) continues to receive inquiries from concerned consumers.

Consumers can be confident as they heat holiday meals or leftovers in the microwave that the FDA carefully reviews the substances used to make plastics designed for food use. These include microwave-safe plastic coverings that keep food from splattering and microwave-safe containers that hold frozen dinners. Even microwavable popcorn bags, which look like paper, actually contain a metalized plastic film that allows them to reach high temperatures so the corn can fully pop.

Under the food additive provisions of the Federal Food, Drug, and Cosmetic Act, new substances used to make plastics for food use are classified as "food contact substances." They must be found safe for their intended use before they can be marketed.

"It's true that substances used to make plastics can leach into food," says Edward Machuga, Ph.D., a consumer safety officer in the FDA's Center for Food Safety and Applied Nutrition. "But as part of the approval process, the FDA considers the amount of a substance expected to migrate into food and the toxicological concerns about the particular chemical." The agency has assessed migration levels of substances added to regulated plastics and has found the levels to be well within the margin of safety based on information available to the agency. The FDA will revisit its safety evaluation if new scientific information raises concerns.

One chemical called diethylhexyl adipate (DEHA) has received a lot of media attention. DEHA is a plasticizer, a substance added to some plastics to make them flexible. DEHA exposure may occur when eating certain foods wrapped in plastics, especially fatty foods such as meat and cheese. But the levels are very low. The levels of the plasticizer that might be consumed as a result of plastic film use are well below the levels showing no toxic effect in animal studies.

Other claims have asserted that plastics contain dioxins, a group of contaminants labeled as a "likely human

carcinogen" by the Environmental Protection Agency. "The FDA has seen no evidence that plastic containers or films contain dioxins and knows of no reason why they would," Machuga says.

Machuga says that consumers should be sure to use any plastics for their intended purpose and in accordance with directions. If you don't find instructions for microwave use, you should use a different plate or container that you know is microwave-safe. Such containers are made to withstand high temperatures.

For example, carryout containers from restaurants and margarine tubs should not be used in the microwave, according to the American Plastics Council.

Inappropriate containers may melt or warp, which can increase the likelihood of spills and burns. Also, discard containers that hold prepared microwavable meals after you use them because they are meant for one-time use.

Microwave-safe plastic wrap should be placed loosely over food so that steam can escape, and should not directly touch your food. "Some plastic wraps have labels indicating that there should be a one-inch or greater space between the plastic and the food during microwave heating," Machuga says.

Always read directions, but generally, microwave-safe plastic wraps, wax paper, cooking bags, parchment paper, and white microwave-safe paper towels are safe to use. Covering food helps protect against contamination, keeps moisture in, and allows food to cook evenly. Never use plastic storage bags, grocery bags, newspapers, or aluminum foil in the microwave.

*-Michelle Meadows  
FDA Consumer Magazine  
November-December 2002*

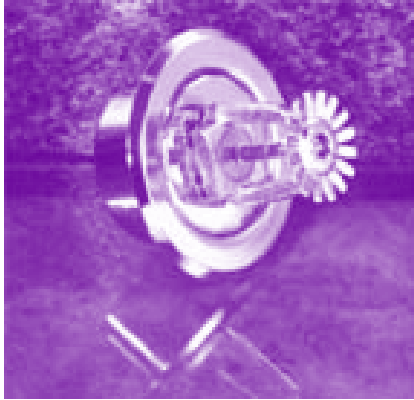
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## Sprinkler Plan Reviews by CRS

Construction Review Services (CRS) reviews fire sprinkler plans for systems that will be installed or modified in hospitals, nursing homes, boarding homes, and other licensed facilities. The codes and standards that are applied include the WACS, UBC-Washington State Amendments, and National Fire Protection Association (NFPA) 13 and 13R.

To assist CRS in this process, we need fire sprinkler contractors to route two sets of plans and specifications through the owner or architect. We will keep one approved set for our files and return the second set to the owner.



The submittal should include plans, specifications, and hydraulic calculations that are stamped and signed by a Washington State Licensed Fire Sprinkler Contractor. The shop drawings shall meet the requirements of Section 8-1, NFPA 13 and include, but not be limited to, the following information:

1. Floor plan to scale with all rooms and areas labeled.
2. Locations of all walls and partitions.
3. Full height cross-section.
4. Current water supply information for new systems.
5. Types and locations of all hangers and braces.
6. Control valves, check valves, and fire department connections.
7. Hydraulic reference points that correspond to hydraulic calculation sheets.

When we review the plans, we are looking for compliance with applicable codes and standards. These are not always clearly spelled out so a certain amount of reviewer experience is applied to the review process.

One area of concern is the use of NFPA 13 vs. NFPA 13R for boarding homes. NFPA 13R allows some unsprinklered areas, which may not provide the best protection for occupancies that may have clients with limited egress capabilities.

Some special considerations as systems is designed include:

1. Local requirements may be more or less strict than the State depending on local ordinance.
2. If attics are not sprinklered in smaller boarding homes per NFPA 13R, heat detection with the alarm system is required.
3. Exit doors that have exterior canopies or roofs above them may be required to have dry sidewall protection above the door and/or under the canopy.
4. Wet systems must be installed in heated areas.

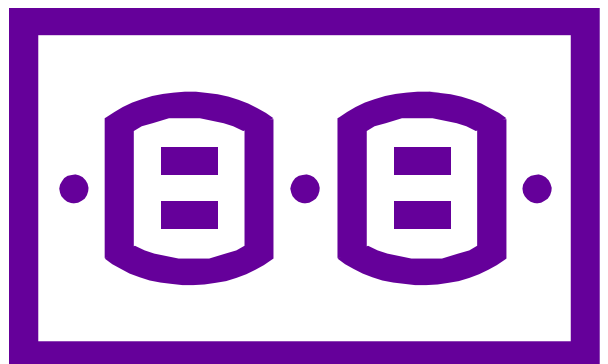
If you have design questions, feel free to contact Chad Beebe or Robert Bradley at Construction Review Services.

-Rob Bradley

## Healthcare Electrical System Workshop

A 2-day workshop titled "NFPA 70/99 Healthcare Electrical System Workshop" will be held February 17-18 in Seattle. It will focus on Article 517 (Health Care Facilities) in the *National Electrical Code*<sup>®</sup>, and on Chapter 4 (Electrical Systems) in *NFPA 99, Standard for Health Care Facilities*. Topics to be discussed include: operating (electrically) in the health care world, how to use NFPA 70 and NFPA 99 more effectively, the electrical distribution system (from service entrance breaker to patient care areas), isolated power systems, the essential electrical system, and more.

For the date and location of the workshop, please contact Burton Klein, PE, *Burton Klein Associates*, Newton, MA, at (617) 916-1827.



News Year Resolutions

A new year means better things to come! Please welcome our new Project Coordinator, Alisa Smith, and Secretary Senior, Jill Anthony. Alisa started with Construction Review Services in September 2002, and Jill in November 2002. Both bring ambition, professionalism, and a desire to make the CRS team better.

Last year, the CRS team committed to meeting target dates assigned to submissions. On average, all were completed within few days of the target date. This year, CRS will strive to improve on submission reviews completed by the target date, as well as committing to improve the ways we currently do business to better meet our customer's needs.

In the future, CRS will prepare and distribute packets of information that will explain in detail the procedures for requesting exemptions and interpretations.

In 2003 CRS will be creating a checklist to be submitted with the application to ensure all of the required information is submitted with the initial submission package. This will reduce delays and errors in the plan review process.

CRS is available to do limited on-site inspections before, during, and after construction. This will help eliminate unnecessary project costs by insuring efficient design and catching mistakes early through CRS technical assistance. It is the goal of CRS to ensure that facility quality meets our customer's expectations for efficiency and functionality.

CRS is Participating in the development of a Technical Advisory Group to gain input from constituents for NFPA related issues.

—Chad E. Beebe, Manager

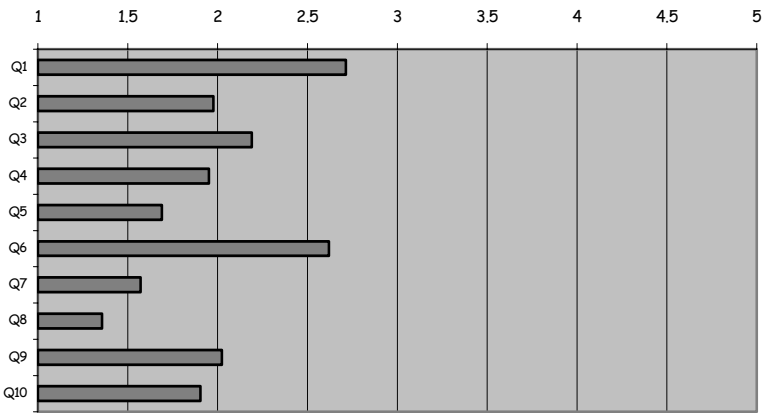
CDC Hand-Hygiene (Continued from Page 1)

The Hand hygiene Guidelines are part of an overall CDC strategy to reduce infections in health care settings to promote patient safety. For more information about the hand hygiene campaign go to <http://www.cdc.gov/hand-hygiene>. For more information about CDC's seven health care safety challenges go to <http://www.cdc.gov/ncidod/hip/challenges.htm>

-CDC Press Release

Survey Results Are In...

Construction Review Services is committed to providing our customers with the best quality service possible. This past summer, I met with my staff and we reviewed our survey results and re-polished our strategic business plan. This annual event gives each of us an opportunity to reflect on the projects that went well, as well as the projects that could have gone better. Although we wish to be able to avoid the later, we realize that as a regulating agency we sometimes a have to make difficult and unpopular decisions. Below are our survey results that we will base our decisions on in the year to come.



Question		Average Score (1-agree 5-disagree)
Q1	The fees paid for construction review were not too high for the level of service received.	2.71
Q2	The staff has been helpful and professional.	1.98
Q3	CRS staff has solved any discrepancies in the interpretation of the codes and regulation in a fair manner.	2.19
Q4	CRS staff has been consistent with interpretations of the codes and regulations.	1.95
Q5	The construction review staff is very knowledgeable about the codes and regulations.	1.69
Q6	The plan review process was performed in a timely manner.	2.62
Q7	Contacting staff by phone, email or any other means has been easy.	1.57
Q8	Staff has treated customers with respect.	1.36
Q9	The service provided by Construction Review was a valuable asset to the completion of your project.	2.02
Q10	The number of staff assigned to your project was appropriate to get your project completed on time.	1.90

We hope that in the year to come, you will find that the improvements in Construction Review Services an asset to the success of your projects.

- Chad E. Beebe, Manager





## From The Mailbag: WSSHE—Plug into the Northwest Network!

Healthcare facility managers in Washington State have a powerful resource available to them to assist with their challenging responsibilities - the Washington State Society for Healthcare Engineering (WSSHE).

WSSHE has grown since its inception in 1972 to become a nationally respected association of over 350 members and associate members. WSSHE members are directly responsible for management of healthcare facilities, or support the healthcare industry via products and services. The "Northwest Network" is a culture of support and cooperation that has been developed between the membership. Are you in need of comparing your facility operation to others?...just plug into the Northwest Network!

WSSHE is a State Chapter of the American Society for Healthcare Engineering (ASHE) - an affiliate of the American Hospital Association (AHA).

WSSHE is organized for educational purposes, and serves its members to provide better patient care through improved engineering practices by:

- Encouraging and assisting members to develop their knowledge of facility engineering principles.
- Conducting regular meetings, annual and semi-annual conferences and educational programs.
- Promoting the exchange of information and ideas among members.
- Promoting communication with related professional associations and societies, regulatory and accreditation agencies.
- Promoting the professional development and recognition for the Society and its members.

WSSHE is comprised of three local Chapters: Eastern, Puget Sound, and Southwest Washington. Each Chapter sponsors regular meetings to provide a forum for education and information exchange. WSSHE sponsors two educational events each year: a spring Semi - Annual Technical Symposium (1 ½ days in Chelan, Washington) and an Annual Conference and Technical Exhibition (2 ½ days rotating in cities around Washington State).



As the pace of our profession accelerates each year, having access to a large network of peers willing to share information can be a strategic asset for you and your organization. Further, WSSHE events are organized and priced to allow members from small and rural organizations to participate.

The place to better understand the benefits of WSSHE membership is online at - <http://www.wsshe.org> where you will find a wealth of current information on WSSHE business including: hot topics, state chapter minutes and upcoming meetings, educational events, membership roster, employment opportunities, and application for membership.

-Submitted by: Geoff Glass, WSSHE Newsline Editor/Historian

If you would like to submit an article for the Square Knot, please email it to [fslcrs@doh.wa.gov](mailto:fslcrs@doh.wa.gov). Articles should be between 350-450 words. The Department reserves the right to edit any published articles. Views expressed in the Mailbag do not constitute endorsement from the Department.

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## WSSHE Semi-Annual Conference

Date: May 1-2, 2003  
 Location: Campbell's Resort, Chelan, WA  
 Topic: Infection Control during Construction Projects  
 Speaker: Andrew J. Streifel, RS  
 Hospital Environmental Health Specialist  
 Department of Environmental Health & Safety  
 University of Minnesota  
 Registration: [www.wsshe.org](http://www.wsshe.org)

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## NFPA Technical Advisory Group

The Department of Health is looking for individuals interested in participating in a National Fire Protection Agency (NFPA) Technical Advisory Group (TAG). The NFPA TAG will meet twice a year starting in February, 2003 and again in August 2003. The group will review proposed changes to NFPA standards that affect healthcare facilities in Washington. The tentative location for TAG meetings will be in the Kent area to make it easily accessible from Sea-Tac for individuals traveling from eastern Washington. Architects, Engineers, and facility representatives that are interested in learning more about the group are encouraged to send an email to [chad.beebe@doh.wa.gov](mailto:chad.beebe@doh.wa.gov)

# The Square Knot

Department of Health  
Construction Review Services  
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"The Department of Health works to protect and improve the health of the people in Washington State."

## The Back Page

### New Home for Construction Review

About the end of January 2003, CRS will be co-located with a large portion of the Department of Health agency staff. The move will disrupt our plan review service for a couple of weeks. However, it is our goal to be ahead of schedule before moving day arrives. As a result of this move CRS will not be scheduling conferences after January 16, 2002. Call us in early February for more information.

Our new location will be in Tumwater, just off Interstate 5 and just down the road from the Olympia Airport. The building is still under construction and has not been issued an address. We are next door to the Tumwater Post Office at 200 Israel Rd, Tumwater. Check our website the first week of February 2003 for driving directions and our new address.

Our mailing address will not change; P.O. Box 47852, Olympia, WA 98504-7852

The new location will also be convenient for those coming to conferences from the Spokane area. Big Sky Airlines plans to schedule service between Olympia and Spokane.

### The next issue ...of the Square Knot is April 2003

Look for these articles in the next issue of the Square Knot:

- Emergency Management for your Facility
- Our New Home—Change after the move
- Food Service Rule Changes

If you would like to submit an article for the Square Knot, please email it to [fslcrs@doh.wa.gov](mailto:fslcrs@doh.wa.gov). Articles should be between 350-450 words. The Department reserves the right to edit any published articles. Views expressed in the Mailbag do not constitute endorsement from the Department.

Deadline for articles is February 3, 2003.  
Editor: John R. Templar, RS

### Construction Review Services Mission

"Construction Review Services protects and improves the health and safety of people in Washington State by providing professional consultation and review for the design and construction of licensed or certified care facilities for our customers."